

Bin Guan

*Water and Carbon Cycles Group
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Education

Ph.D., 2008, Atmospheric and Oceanic Science, University of Maryland, College Park.
Thesis: Pacific sea surface temperatures in the twentieth century: variability, trend, and connections to long-term hydroclimate variations over the Great Plains. Advisor: **Sumant Nigam**.
M.Phil., 2003, Applied Physics, City University of Hong Kong, Hong Kong, China.
Thesis: Summer monsoon over the western North Pacific: the onset and the intraseasonal variations. Advisor: **Johnny Chan**.
B.S., 2000, Atmospheric Sciences, Nanjing University, Nanjing, China.
Thesis: A monotonic filter for limited area modeling.

Research Interests

Climate Variability/Change, Water Cycle.

Honors/Awards

2008–: Member, the Honor Society of Phi Kappa Phi.
2007–2008: Ann G. Wylie Dissertation Fellowship, University of Maryland Graduate School.
2007: Jacob K. Goldhaber Travel Award, University of Maryland Graduate School.
2003–2008: Research Assistantship, Department of Atmospheric and Oceanic Science, University of Maryland, College Park.
2001–2003: Postgraduate Studentship, City University of Hong Kong, Hong Kong, China.
1997, 1998: Outstanding Student Award, Nanjing University, Nanjing, China.
1996–1999: Scholarship, Nanjing University, Nanjing, China.

Research Experience

Postdoctoral Scholar (with Duane Waliser and Noah Molotch), Jet Propulsion Laboratory, Pasadena, California, 2009.03–.

Research Assistant, Research Associate (with Sumant Nigam), Department of Atmospheric and Oceanic Science, University of Maryland, College Park, 2003.08–2009.02.

Graduate student researcher (with Johnny Chan), Department of Physics and Materials Science, City University of Hong Kong, 2001.08–2003.08.

Undergraduate/graduate student researcher (with Yuan Wang), Department of Atmospheric Sciences, Nanjing University, Nanjing, China, 1999.09–2001.08.

Professional Association

2004–: Member, American Geophysical Union.

Referred Publications

- Guan, B.**, and S. Nigam, 2009: Analysis of Atlantic SST variability factoring inter-basin links and the secular trend: clarified structure of the Atlantic Multidecadal Oscillation. *J. Climate*, in press.
- Guan, B.**, and S. Nigam, 2008: Pacific sea surface temperatures in the twentieth century: An evolution-centric analysis of variability and trend. *J. Climate*, **21**(12), 2790–2809.
- Guan, B.**, and J. C. L. Chan, 2006: Nonstationarity of the intraseasonal oscillations associated with the western North Pacific summer monsoon. *J. Climate*: **19**(4), 622–629.

Presentations

- Guan, B., 2008: Twentieth century SST trend and natural variability: clarified structure, and implications to Atlantic hurricane activities. Seminar, Shanghai Typhoon Institute, China Meteorological Administration, Shanghai, China.
- Guan, B., 2008: Pacific sea surface temperatures and long-term hydroclimate variations over the Great Plains. Yuk L. Yung Lunch Seminar, Division of Geological and Planetary Sciences, California Institute of Technology.
- Guan, B., 2008: Pacific sea surface temperatures and long-term hydroclimate variations over the Great Plains. Joint Institute for Regional Earth System Science and Engineering, University of California, Los Angeles.
- Guan, B., 2008: Pacific and Atlantic SSTs in the twentieth century: a clarifying analysis of decadal/multidecadal variability structure. Seminar, Earth System Science Interdisciplinary Center, University of Maryland, College Park.
- Guan, B., 2008: Pacific sea surface temperature variability in the twentieth century: ENSO, decadal variability, and secular trend. Oral presentation at the Laboratory for Atmospheric Research, City University of Hong Kong, Hong Kong, China.
- Guan, B., 2008: Pacific sea surface temperature variability in the twentieth century: Spatiotemporal structures, and connections to long-term droughts over the Great Plains. Seminar, NOAA/Geophysical Fluid Dynamics Laboratory, Princeton University, Princeton, New Jersey.
- Guan, B., and S. Nigam, 2007: Pacific sea surface temperatures in the twentieth century: An evolution-centric analysis of variability and trend. Poster presentation, the 2007 AGU Fall Meeting, San Francisco, California.
- Guan, B., and S. Nigam, 2006: Pacific decadal SST variability 1900–2002: Structure and evolution. Oral presentation, the Eleventh Annual CCSM Workshop, Breckenridge, Colorado.
- Guan, B., 2005: Pacific decadal variability: Structure and mechanisms. Seminar, Department of Atmospheric and Oceanic Science, University of Maryland, College Park.